Insight and analysis on California education policy

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Where Have All The Teachers Gone?

Finding Answers to the Most Basic Questions about California's Teacher Workforce

The Need for an Effective Teacher Data System

There is an increasing awareness in California of the need to ensure that every child in every classroom has a fully qualified and effective teacher. Legislation, litigation and accountability systems are steadily increasing the pressure on state policymakers to turn that vision into a reality. Unfortunately, that effort is being undermined by California's inability to collect and analyze data on its teaching workforce. Gaps in the collection, use, and availability of data seriously compromise efforts to plan and monitor the teacher workforce at both the state and local levels, leaving policy-makers and education officials with little indepth understanding of the current shortage of qualified teachers, the inequitable distribution of fully qualified teachers, or a clear picture of future workforce needs.

At the state level, data on teacher qualifications are needed to fulfill the new reporting requirements of the federal No Child Left Behind Act (NCLB) and the recent Williams lawsuit settlement. At the county and district levels, local officials need reliable data to monitor the match between teachers' assignments and their credentials, understand what attracts teachers to the profession, and determine what contributes to their decision to leave it.

Simply put: state and local decision-makers need good data on the make-up of the K-12 teacher workforce. But in order to get this information, the state's teacher data system needs to be redesigned.

What Kinds of Data Are Needed?

While a variety of public and private institutions gather a great deal of data on teachers — including the California Department of Education (CDE), the California Commission on Teacher

Credentialing (CCTC), the California State Teachers' Retirement System (STRS), and universities that prepare teachers — these data sources cannot provide some of the most basic information about the teacher workforce on a regular basis. They often fail to meet state and local needs under current reporting conditions and have little chance of meeting the new federal reporting requirements. For example, existing data sources on the teacher workforce are unable to provide some of the most basic information that would help state and local policymakers meet future hiring demands, allocate resources, and plan for professional development including:

- the number of individuals who leave the teaching workforce in any given year;
- the number of qualified individuals who return to the workforce in any given year;
- the number of teachers who move from one school to another, or one district to another, or any demographic information about the districts that they leave or join;
- the number of teachers in the state who actually take a teaching job after graduating from a teacher credential program, or any demographic information about the schools they end up in; and
- the number of teachers who hold undergraduate degrees in the subject area they are teaching.

The existing system also makes it difficult for local education agencies to compile data for reporting required under NCLB; quickly and easily access information from state agencies (such as whether teachers are NCLB-compliant); and easily transfer information to other districts.

Two Key Problems

The deficiencies of California's available data are due to two primary and related problems:

- Fragmented responsibility for collecting and reporting teacher data. Because the
 agencies listed above were established to perform specific, independent functions that are
 not linked by a common plan for data use, they act in isolation and make decisions that
 often prevent their data from being used in analyses of the state's overall teacher workforce.
- Lack of a commonly used unique teacher identifier to allow linkage across data systems. Though other key agencies use Social Security Numbers (SSNs) as a unique identifier to ensure confidentiality, the state's most important source of teacher data, CDE's California Basic Education Data System (CBEDS), does not. Without such a mechanism, CBEDS data cannot be linked with other agencies' data and cannot be analyzed over time, diminishing the capacity of the entire CBEDS data collection effort.

Sources: CDE, SRI Analysis

These issues can be addressed if California adopts a unique identifier for use across all teacher record systems and a common plan for data collection, linkage, and analysis. Other states that have pursued these activities, such as Connecticut, Florida, Georgia and Texas, have established data systems which provide policy-makers access to far more powerful, dependable information than California has on teacher placement, retention, retirement, and shortage areas.

For the past two years, the Legislative Analyst's Office has recommended the development of a teacher data system that would include a unique teacher identifier. More recently, an informal working group has been exploring ways to maximize the usefulness and reliability of California's teacher data system. This group includes representatives from teacher organizations (California Federation of Teachers and California Teachers Association), school administrators (Association of California School Administrators and California County Superintendents Educational Services Association), various state agencies (State Department of Education, Commission on Teacher Credentialing, California State University, and California School Information Services), and the Center for the Future of Teaching and Learning. Most recently, AB 1213 (Wyland), passed by the Assembly Committee on Education in May but held in Appropriations, proposed the creation of a unique identifier for all public school teachers in order to "enable the Superintendent [of Public Instruction] to assess the effectiveness of policies, programs, and expenditures, to analyze the pathways to teaching, and to evaluate teacher mobility and retention programs."

The Center View

California needs an effective system for the collection and analysis of data on the state's teaching workforce. Building on the foundations of current efforts — and based on years of experience in workforce research — we offer the following recommendations:

- 1. A common identifier, such as teacher Social Security Number (SSN) or another unique teacher identifier should be used by all relevant agencies to enable longitudinal analysis and linkage across datasets. Specifically, if SSNs are chosen, California Basic Educational Data System (CBEDS) teacher-level records should add teacher SSNs to their records; California Commission on Teacher Credentialing (CCTC) should continue to collect teacher SSNs; and state-supported teacher programs, such as Beginning Teacher Support and Assessment (BTSA) and California Subject Matter Project (CSMP), should begin or continue to collect participant SSNs.
- 2. An independent organizational structure should be adopted at the state level to oversee the teacher data system and ensure accuracy, validity and appropriate access over time. This entity be it a coordinating group or a new independent agency would develop a time line and common vision for the system and oversee implementation of the following recommended steps.

- 3. Data collected by different agencies and/or organizations such as CCTC, CDE, STRS and statewide teacher programs should be merged on a regular, timely basis. A dataset including the elements listed in this paper should be compiled annually and made available for analysis by approved agencies.
- **4.** Analyses of the data in the teacher data system should be performed annually on a specified time line and made available to policy-makers and the public. In concert with the legislative session, accurate, reliable data should be made available to the policy community as a basis for decision-making.
- **5. Measures to ensure access to the data for legitimate research should be established.** Raw and aggregate data (stripped of any identifying information) should be made available publicly, and/or procedures for researchers to request special access should be established to facilitate analysis for research purposes.
- **6.** A regular system of accounting for data accuracy should be established to ensure that data and subsequent analyses are reliable. Inaccuracies within data systems stymie analysis and may lead to misunderstanding and poor policy choices. Regular and timely checks of the data should be routine in any database used for decision-making purposes.
- 7. Standards should be developed and used across all involved agencies to protect teacher privacy and ensure appropriate uses of the data system for the purposes of evaluating programs and policies. In particular, these standards should include vigorous safeguards against theft or inappropriate use of unique teacher identifiers, including individual sanction or reward.

An overhaul of California's teacher information system is long overdue. NCLB has presented the state with an opportunity to rethink the current system and redesign it to meet new federal reporting requirements. At the same time, policy-makers have a responsibility to think, long-term, about the state's data needs and develop a system that not only meets federal demands, but also provides state and local entities with the data they need to inform teacher policies and programs on an ongoing basis. Without a revamped teacher information system, the state risks continuing to invest money in ineffective efforts that fail to achieve the end goal: to ensure that every California child has a fully prepared and effective teacher.